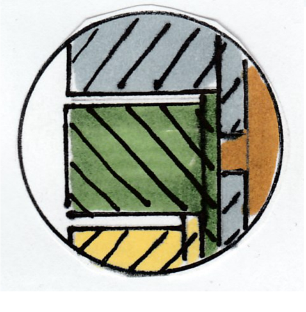
OILING THE TUBES

I HAD ACTUALLY THOUGHT OF THIS METHOD FIRST BUT WAS CONCERNED THAT THE TUBE ① ASSEMBLY WOULD PUSH OUT TOO MUCH OIL AT THE BOTTOM. BUT A THICKER OIL WOULDN'T DO THAT I PRESUME IN HINDSIGHT.

LUBRICATION AT ⑦ BASE OCCURS BY THE DRILLED OUT VOLUME IN THE TUBE. THE OIL IS TRANSPORTED BY TINY INCREMENTS ALL THE WAY TO THE INNER WALL OF ⑦ BASE PASSING THROUGH ALL FIVE TUBES OR TUBE/DISC ASSEMBLIES



NOTE 1

IN THE ILLUSTRATION DISC 2 ONWARDS SHOW THAT THE SOLDERED TUBE IS ALSO DRILLED THROUGH, BUT THERE IS NO NEED AS IT IS SOLDERED TO THE TUBE. ONLY MOVING PARTS NEED TO BE LUBRICATED

NOTE 2

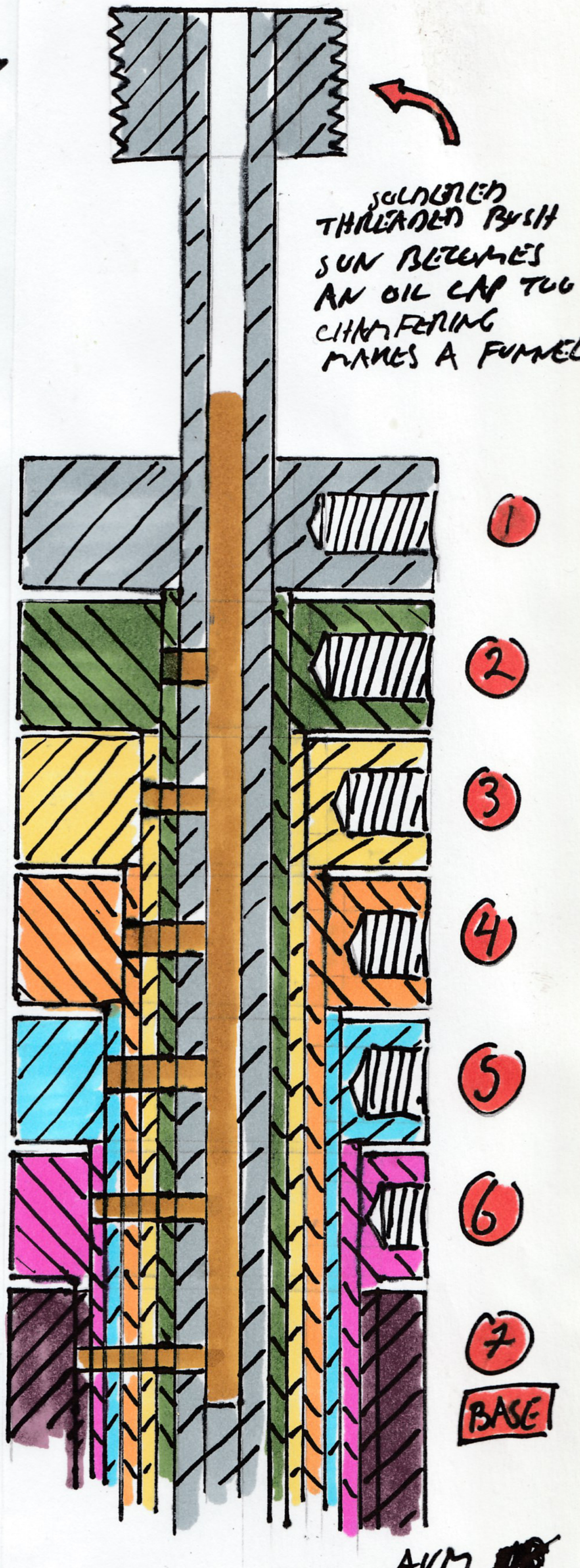
TUBE 1 IS SOLDERED UNDERNEATH SO THAT IT BECOMES A RESERVOIR FOR OIL ON THE TOP AN M8 OR M10 BUSHING IS SOLDERED, THIS ALLOWS THE ATTACHMENT OF A SUN WITHOUT LOSING STRENGTH AS DIRECTLY CUTTING WOULD WEAKEN THE TUBE. EXISTING SUNS WOULD NEED ADAPTATION.

TUBE 1 WOULD DISPLAY 6 HOLES AT EQUAL DISTANCE BELOW ITS DISC. TUBE 2 WOULD DISPLAY 5 HOLES AT EQUAL DISTANCE ETC.

NOTE 3

THE LUBRICATION HOLES WOULD PROBABLY NEED TO BE DRILLED TOGETHER*, DEPENDING ON THE HEIGHT OF THE DISCS

* ALL TUBES TOGETHER



SOLDERED THREADED BUSH SUN BECOMES AN OIL CAP TOO CHAMFERING MAKES A FUNNEL

AVM 26

I LIKE THE IDEA OF THE SUN AS AN OIL CAP. EXCESS OIL WOULD LUBRICATE THE DRIVE GEARS BELOW

BUT...

WITH SIX LUBRICATION HOLES, WOULD TUBE ① RELEASE TOO MUCH OIL?

ALTERNATIVE

GREASING PLANET ARMS

NOT USED YET!

ROD (1) IS DRILLED TO 10 MM BELOW THE TOP OF (7) BASE

(1)

AND THE REST OF THE TUBES ARE DRILLED AT RIGHT ANGLES

(2)

( )

THIS MEANS THAT OIL USES GRAVITY TO DELIVER TO ALL TUBES

( )

DRAWBACKS

( )

DRILLING 6MM ROD OR PLUGGING THICK WALLED 6MM TUBE

(6)

ONLY (MOTOR) OIL CAN BE USED

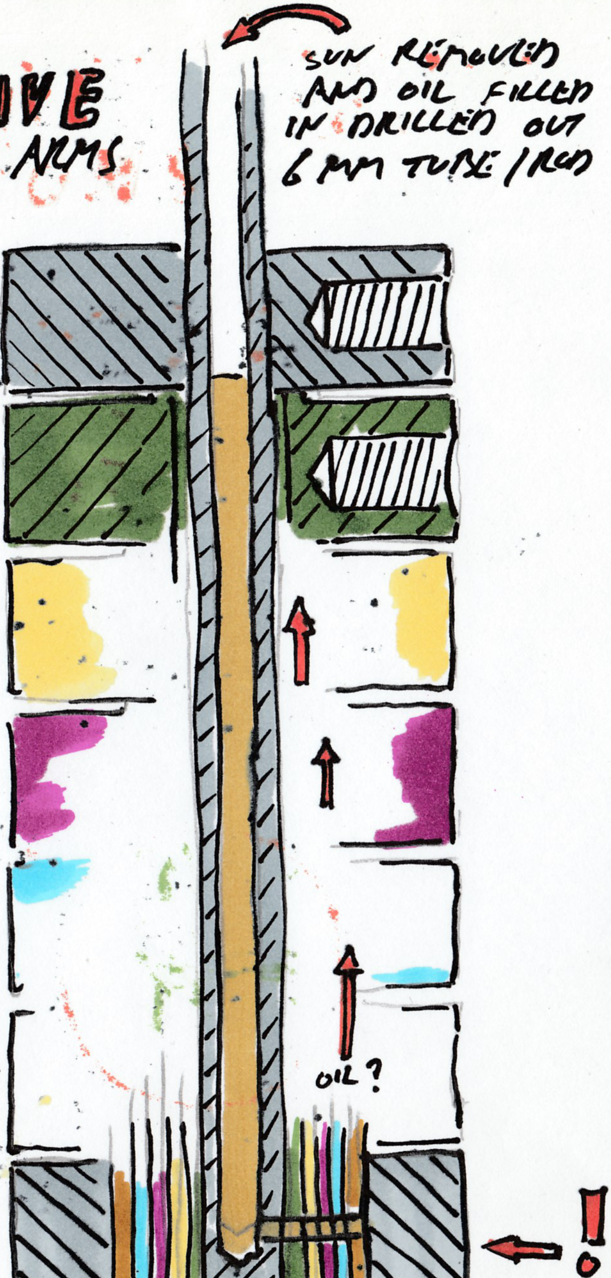
QUESTIONS?

(7)

BASE

WOULD CAPILLARY ACTION BRING OIL ALL THE WAY UP TO (2)

● SUFFICIENTLY?



A 2 OR 3 MM HOLE IS DRILLED THROUGH (2) (3) (4) (5) AND (6) 10 MM BELOW (7) BASE TOP INTO DRILLED (1) ROD

AVM26

NOTE

I REALLY APPRECIATE THE IDEA OF REMOVING THE SUN AS A CAP TO OIL THE EXPLANETARIUM EVERY NOW AND THEN.
I'D LIKE FOR THE FIRST ALTERNATIVE DEPICTED. THAT IS, WITH JUST THE ONE ALIGNED SET OF DRILLED HOLES BELOW ⑦ [BAL] TO WORK WITH AN M10 BUSHING FOR THE SUN. IT'S A CLEAN / KEEP IT SIMPLE BUT ALSO INTUITIVE APPROACH. HOWEVER I DON'T HAVE ANY 6MM SOLDERABLE TUBES SO FOR NOW, WELL, FOR ALL, INDIVIDUALLY GREASING THE M5 PLANET ARM DISCS IS THE ONLY WAY, IF APPLICABLE. THE CAVEAT IS THAT ONLY HALF OF THE EXO-PLANETARIUM ORRERIES I'VE MANUFACTURED HAVE THE GREASING HOLES. EVEN LESS THE ⑦ [BAL] GREASING POINT.

THE LAST SWEDA

YESTERDAY I BOUGHT THE LATER VERSION SWEDA CASH REGISTER. I SHOULD HAVE NOTICED IT WAS CONSIDERABLY LIGHTER. AT €20 EUROS AND A 12 MINUTE DRIVE AWAY, I COULDN'T LEAVE IT. WHILE OLDER VERSIONS HAVE 5MM BRASS OR ALU SIDE PLATES, THIS WAS 2MM STEEL. IT STILL YIELDED THE ALL IMPORTANT TUBE ASSEMBLY FOR A 6 PLANET ORRERY AND THE NUMBER AND DATE RINGS I USE FOR A "CENTIPEDE". IF I COULD EVEN BUY THESE VERY WELL FITTING TUBES I COULD CUT TO LENGTH, THEY'D BE PROHIBITIVELY EXPENSIVE. NOW THE PLANET ARM DISC AND DRIVE GEAR ON THE OTHER END AND WHAT CAN BE CUT FROM THE LENGTH DETERMINES ALL.